

## **MUREP Precollege Summer Institute (MUREP PSI) Awards – FY2023**

**Title:** Fayetteville State University's NASA MUREP Precollege Summer Institute: Cutting-edge Technologies for Examining Climate Change (FSU-CTECC)

**Institution:** Fayetteville State University

**City/State:** Fayetteville, North Carolina

**PI:** Trung Tran

**FY:** 2023

### **Summary:**

Fayetteville State University (FSU) is proposing to establish two-week long residential STEM Precollege Summer Institute (FSU PSI) summer camps over the five-year period of the project for twenty high school students recruited each year from high schools in Cumberland County and its surrounding counties in North Carolina. The project is titled Fayetteville State University's NASA MUREP Precollege Summer Institute: Cutting-edge Technologies for Examining Climate Change (FSU-CTECC) with the overarching goal being increasing interest in STEM of high school students, especially underrepresented/underserved students, and equip them with the tools necessary for their success in college STEM degree programs leading to STEM careers through their engagement and interaction with NASA's Earth Science. To provide the best hands-on and authentic STEM experience for students, the program has partnered with NASA's JPL and Goddard Space Flight Center Earth Science Education/Outreach and multiple academic organizations and industries to provide STEM workshops to the students. Students will be introduced to using cutting edge technologies including remote sensing, GIS, drone, and 3D printing to tackle various climate change issues through hands-on and authentic solution design, data collection and analysis, and drone engineering activities.